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REMARKS

Claims 1-4, 7, 8, 10-12, and 40-42 are of record in this application. Claims 1, 7, 8, 10, 40, and 41 have been amended, claims 5, 6, 9, 13, and 14 have been canceled, and new claim 42 has been added.

Applicants reserve the right to file one or more Continuing applications drawn to the subject matter of the claims as previously presented.

Applicants kindly thank the Examiner for indicating that the incorporation of claims 5-7 and 14 into claim 1 would overcome the prior art rejections. Accordingly, claim 1 has been amended to incorporate the limitations of claims 5-7 and 14 therein with one exception. Claim 1 is not limited to wood as the bait matrix, which was recited in original claim 7. Rather, claim 1 is limited to a bait matrix which comprises a cellulose containing material (claim 6 and described at paragraph 0022 on page 7 of the specification). Claim 1 has been limited to the other limitation of claim 7, namely that the "total" concentration of the nitrogen containing compound "plus any endogenous amino acids, polypeptides, and proteins in said bait

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matrix" is less than about 1000 ppm. For reasons discussed in greater detail hereinbelow, Applicants respectfully submit that the claims of record clearly distinguish over the prior art of record. Limiting the claims to a wooden bait matrix is not necessary.

Support for the amendment to claim 1 is inherent in the disclosure. Specifically, the concentration range of the nitrogen containing compound "between about 10 to about 1,000 ppm" is supported by the specification at page 10, lines 1-3. Applicants note that the upper limit of "about 1,000" ppm is supported by originally filed claim 1 and throughout the specification such as at page 3, paragraph 0008, and the last line of paragraph 0027 on page 10. Support for the recitation that "said nitrogen containing compound being provided in an amount effective to stimulate termites to feed or mask the unattractiveness of other compounds or both" is found in original claim 1. Although the identical limitation was recited in original claim 1, it was moved to improve the readability of the claim. Support for the remaining amendments to claim 1 may be found in originally filed claims 5-7 and 14. Finally, new claim

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42 finds support in the original specification at page 10, lines 1-3.

Rejection Under 35 U.S.C. 112

Claims 1-14, 40, and 41 have been rejected under 35 U.S.C. 112, second paragraph, as indefinite. The Examiner has taken the position that the phrase "less than about" 1,000 ppm is indefinite. Applicants respectfully disagree.

Applicants believe that the remarks presented in response to this rejection in the last amendment are still appropriate and are therefor repeated. However, in an effort to expedite prosecution, the claims have been amended to a concentration range of "between about 10 to about 1,000 ppm". Applicants respectfully submit that any practitioner of ordinary skill in the art would have no difficulty understanding this claim or determining its scope. Again, see Applicants' remarks presented in the last amendment.

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Rejection Under 35 U.S.C. 103

Claims 1-3, 5, 6, 8, 9, 12-14, 40, and 41 have been rejected under 35 U.S.C. as being unpatentable over McPherson et al. in view of Henderson et al. The Examiner has taken the position that it would have been obvious to modify the termite bait of McPherson et al. by adding urea thereto as disclosed by Henderson et al. Applicants respectfully disagree.

Applicants believe that the remarks and Declaration presented in response to this rejection in the last amendment are still appropriate and are therefor repeated. However, the claims have been amended nonetheless in an effort to expedite prosecution. Clearly, the prior art does not disclose or suggest using a concentration of urea or uric acid between about 10 to 1,000 ppm as claimed, much less a total concentration of nitrogen containing compound plus any endogenous amino acids, polypeptides, and proteins in the bait matrix of between about 10 to 1000 ppm.

McPherson et al. (hereinafter referred to as McPherson) disclosed extracts from fungi which were effective to stimulate termite feeding. The reference disclosed that the extracts

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appeared to contain a plurality of different active compounds (col. 11, lines 22-25). However, the structures of the active agents were not determined, other than speculation that the agents contained hydroxyl groups which were necessary for activity (col. 12, lines 28-32). The reference further disclosed that the extracts may be added to conventional termite baits.

Henderson et al. (hereinafter referred to as Henderson) disclosed that the addition of urea or three L-amino acids to termite baits may increase the acceptance of the baits by Formosan termites. With respect to urea, corrugated cardboard disc baits were soaked in either 0.1%, 0.5%, 1.0%, 2.0%, 4.0%, or 8% solutions of urea (w/v), dried, placed into plastic petri dishes with Formosan termites, and incubated. Following incubation, the discs were weighed to determine weight change as a measure of termite consumption (page 2 of the publication). Henderson disclosed that those discs soaked in 1.0%, 2.0%, 4.0%, or 8% solutions of urea exhibited significantly greater consumption by the termites relative to untreated controls, and that bait consumption increased with higher urea concentrations (page 3). However, the publication further disclosed that discs

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soaked in 0.1% and 0.5% solutions of urea were not consumed to a significantly greater extent than the untreated controls (page 3). No statistically significant increase in termite feeding was observed following addition of these low concentrations of urea to the baits. The reference did not disclose the concentration or amount of urea which was retained in the cardboard disc baits following soaking in the various solutions.

Applicants' claimed invention is drawn to a method for aggregating termites to a desired location by providing a composition which comprises a cellulosic bait matrix and a low concentration of a nitrogen containing compound selected from urea or uric acid. Applicants have unexpectedly discovered that the affinity or aggregation of termites to these nitrogen containing compounds is significantly increased when they are used at concentrations less than or equal to about 1,000 ppm (i.e., 0.1%, by weight), in comparison to the use of the same compounds at higher levels, particularly greater than or equal to 2500 ppm. Moreover, Applicants have further discovered that at these low levels, the nitrogen containing compounds are also effective for masking or camouflaging the presence of a wide

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variety of compounds from the termites (such as insecticides, termite growth regulators, and colorants) which are normally repellent to subterranean termites. Thus the amount of the nitrogen containing compound provided in the composition is effective to stimulate termite feeding and/or mask the unattractiveness of other compounds, but is not so great as to be termiticidally effective. As amended, claim 1 is further limited to a composition wherein the total concentration of the nitrogen containing compound plus any endogenous amino acids, polypeptides, and proteins in the bait matrix, is between about 10 - 1,000 ppm. This is not disclosed or suggested in the prior art relied upon.

Although McPherson does disclose wood termite baits, neither of the references relied upon disclose or suggest the claimed urea or uric concentrations, nor the claimed total nitrogen concentration. As discussed at length in the last amendment, the references would suggest using a much higher concentration than claimed by Applicants. In brief, Henderson discloses that only cardboard bait discs soaked in urea solutions wherein the urea concentration was 1% or higher increased attraction to the bait

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discs. At lower urea concentrations (i.e., 0.5% or less), no increase in attraction was observed. As set forth in the above-mentioned Declaration, soaking cardboard discs in a 1.0% urea solution as disclosed by Henderson would yield a urea concentration in the disc of approximately 6,870 ppm, while soaking the cardboard discs in a 0.5% urea solution would yield a urea concentration in the disc of approximately 3,435 ppm. Thus, the Henderson publication teaches that a termite baits must contain approximately 6,870 ppm or more of urea to increase termite attraction to the bait. Conversely, Henderson teaches that termite baits containing 3,435 ppm or less of urea do not exhibit an increase termite attraction to the bait.

Applicants respectfully submit that if a practitioner of ordinary skill in the art were to combine the two references relied upon, they would arrive not at the claimed invention but at a termite bait having much higher levels of urea than claimed by Applicants. Specifically, Henderson would suggest that the urea concentration added to any termite bait should be greater than 3,435 ppm. The skilled practitioner would have no motivation to use lower concentrations in a bait because

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Henderson teaches that urea concentrations less than or equal to 3,435 ppm do not increase termite attractancy. Thus, rather than suggesting Applicants' claimed invention, the combination of references would actually teach against it.

Applicants have noted the Examiner's comments that Henderson tested urea dosages which were within the claimed concentration range. Noting this the Examiner has concluded that:

"So we have no reason to doubt that Henderson at low doses would be different from the instant invention at the same level ... The only alternative, is that what is instantly claimed is not in fact the invention ..."

In response, one can only speculate why Henderson failed to observe an increase in attraction when using low doses of urea. However, this issue is not material to the instant rejection under 35 U.S.C. 103. Rather, it is well established that the issue to be determined in the rejection of claims under 35 U.S.C. 103 is whether the prior art would suggest the invention as claimed. Here, the prior art relied upon clearly teaches that low concentrations of urea are not effective; the authors disclosed that they did not observe an increase in attraction at the low urea concentrations. Thus, as noted above, a

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practitioner of ordinary skill in the art, with the references of record before them, would have no motivation to modify the teachings of the references to arrive at Applicants' claimed invention.

Rejection Under 35 U.S.C. 102/103

Claims 1, 2, 5, 6, 13, 14, 40, and 41 have been rejected under 35 U.S.C. 102(a) as being anticipated by, or obvious over American Cyanamid (JP 2000-7516). Applicants respectfully disagree.

The English abstract of the Japanese patent states that a termite bait composition "containing no ureide" is claimed (a ureide being defined in the art as a derivative of urea). However, the abstract does disclose a termite bait containing cellulose, wood, and 4% uric acid, by weight. The reference does not disclose or suggest the claimed low concentration of uric acid.

Applicants' invention and amended claims were described *supra*. As amended, claim 1 is not only limited to an amount of the nitrogen containing compound which is effective to stimulate

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termite feeding and/or mask the unattractiveness of other compounds while not being so great as to be termiticidally effective, but the claim is further limited to a composition wherein the total concentration of the nitrogen containing compound plus any endogenous amino acids, polypeptides, and proteins in the bait matrix, is between about 10 - 1,000 ppm. This is not disclosed or suggested in the prior art relied upon.

Although the English abstract of the Japanese patent discloses a termite bait containing uric acid, the concentration of the uric acid is significantly higher than the claimed concentration. Again, the abstract discloses using 4% uric acid by weight. This concentration is equivalent to 4 g uric acid per 100 g of bait composition, which is equivalent to 40g/kg or 4×10^4 mg/kg. Since 1 ppm is equal to 1 mg/kg, the concentration of uric acid in the bait of the abstract is 40,000 ppm, or 40 times greater than Applicants have claimed. Thus the abstract cannot anticipate the claimed invention.

Moreover, Applicants submit that a skilled practitioner would have no motivation to modify the teachings of the abstract to arrive at the claimed invention, and if anything, the abstract would teach away from the claimed invention. As noted above, the

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bait composition disclosed in the abstract has a uric acid concentration of 40,000 ppm, which is 40 times greater than Applicants have claimed. At no point does the reference disclose or suggest that the concentration should be lower, but that it should still be present. Indeed, if anything, the title, a "Termite bait composition having **no** ureide..." (emphasis added) would suggest that no uric acid at all should be used. Certainly, there is no suggestion of using the low amounts claimed by Applicants, i.e., between about 10-1,000 ppm.

Rejection Under 35 U.S.C. 103

Claims 1-3, 5, 6, 8, 9, 12-14, 40, and 41 have been rejected under 35 U.S.C. 103 as being obvious over Thorne et al. The Examiner has taken the position that it would have ben obvious to determine the optimum level of attractancy of the urea or uric acid. Applicants respectfully disagree.

Thorne et al. discloses a termite bait composition comprising cellulose, water, a binder, and a nitrogen compound (col. 1, lines 33-35). The reference discloses that addition of nitrogen increases attraction to and consumption of the bait, and that nitrogen sources include urea, uric acid, amino acids, and polypeptides (col. 3, lines 18-23). Thorne further discloses

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that the concentration should not be so high as to be repellant, and that suitable concentrations of the nitrogen compound range from 0.25 to 5%, by weight (col. 3, lines 42-45).

The instant invention was described *supra*.

Although Thorne discloses the benefits of adding urea or uric acid to a termite bait, the reference teaches using significantly greater concentrations than the instant invention. The lowest concentration disclosed by Thorne is 0.25%, by weight (col. 3, lines 42-45), which is equal to 0.25g/100g or 2,500mg/kg. Since 1 ppm is equal to 1 mg/kg, the lowest concentration of urea or uric acid disclosed by Thorne is 2,500ppm. This is 2½ times greater than the upper limit claimed by Applicants.

Applicants respectfully submit that a practitioner of ordinary skill would have no motivation to arrive at the claimed invention from the disclosure of Thorne. The broadest range of urea or uric acid concentrations disclosed by Thorne is 0.25-5% (col. 3, lines 42-45). There is no suggestion that significantly lower concentrations would be effective. The skilled practitioner would have no reason to expect that concentrations 2½ times lower than the lowest concentration disclosed by Thorne would be effective. As for the Examiner's suggestion that it

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would have been obvious to determine the optimum level, the use of concentrations which differ by at least 2½ times from the disclosed prior art is well outside the realm of what would be achieved by "routine optimization." Again, Applicants discovery that concentrations of urea between about 10 - 1,000 ppm are effective for stimulating termite feeding and/or masking the presence of other compounds which are unattractive to termites is totally unexpected.

Finally, although Thorne recognizes that excessive levels of nitrogen could repel termites, Applicants submit that at most this would only deter the skilled practitioner from using concentrations significantly above 5%. Again this would not suggest using Applicants' claimed ranges.

For the reasons stated above, claims 1-4, 7, 8, 10-12, and 40-43 are believed to satisfy the requirements of 35 U.S.C. 112 and distinguish over the prior art of record. Allowance thereof is respectfully requested.

Respectfully submitted,



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